

REMARKS

Claims 1-8 and 10-19 are currently active.

The Examiner has rejected Claims 1-8 as being anticipated by Suzuki.

Applicants respectfully traverse this rejection.

Suzuki teaches a data transfer system which can make a stable communication without causing erroneous operations when a communication is resumed after suspension due to an abnormal state such as a power failure. See column 2, lines 17-22. Abnormal circumstances may include a power failure, a momentary power failure, and hang up or the like. See column 2, lines 32-35.

Suzuki teaches a data transfer system employing a bus, a master device 1 composed of a microcomputer and a plurality of slave devices 2.

The master device has a terminating function which transmits a stop condition as signals for terminating communication to the slave devices in order to terminate communication at the time of the occurrence of abnormal circumstances during communication. A master device also has a resuming function which transmits a start

condition as signals for resuming communication to the slave devices after transmitting a stop condition at the time abnormal circumstances are resolved.

At the time of an occurrence of abnormal circumstances, the master device detects variations of a power source voltage, and determines that an abnormal circumstance such as a power failure, a momentary power failure and the like occurs when the power source voltage decreases below a predetermined value. Subsequently, the master device transmits a stop condition to the slave device in transit, and terminates communication. See column 3, lines 30-50.

The slave device operates to suspend communication upon receipt of the stop condition, thereby ensuring that a data transfer suspended by the master device is not continued at the slave device. Although a power voltage is gradually decreased due to an interruption of power supply, the slave device is operable for a certain period after the occurrence of a power failure since a power supply voltage for stopping the slave device is considerably low. Accordingly, the slave device can receive the stop condition from the master device within this period. When a power supply is resumed after resolving a power failure, the master device detects a power voltage and determines that a normal state is recovered, and then starts to operate. In case the master device is suspended due to the

occurrence of abnormal circumstances, the operation is resumed by inputting reset signals.

See column 3, line 60-column 4, line 3.

Claim 1 of applicants has the limitation of "the master unit having a software program causes the master unit to automatically recover and restart when a slave unit fails which has caused the master unit to fail and to avoid further accessing the failed slave unit." It is respectfully submitted that Suzuki does not teach or even suggest this limitation. As explained above, Suzuki is focusing on some form of a power failure and certainly does not teach or suggest anywhere the very specific event of a slave unit failing which causes the master unit to fail. In fact, from the teachings of Suzuki, it is clear that the slave unit does not fail and must be sent a stop condition since power voltage is gradually decreased due to an interruption of power supply and the slave device is operable for a certain period after the occurrence of a power failure since the power supply voltage for stopping the slave device is considerably low. Thus, not only does Suzuki fail to teach or suggest that it is the slave unit which fails which causes the master unit to fail, but one of the key teachings of Suzuki is for a stop condition to be transmitted to the slave device so no faulty data is received and processed by the slave device which has remained active.

Additionally, Suzuki does not teach or suggest that the master unit avoids further accessing the failed slave unit. Suzuki simply teaches that a stop condition is sent to

the slave device and after the power failure is resolved, communication is resumed to the slave device. See column 4, line 11. Accordingly, Claim 1 of applicants is not anticipated by Suzuki.

Claims 2-5 are patentable for the reasons Claim 1 is patentable.

Claim 6 is patentable for the reasons Claim 1 is patentable.

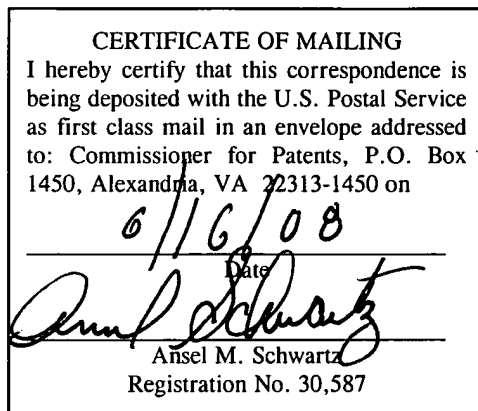
Claim 7 is dependent to parent Claim 6 and is patentable for the reasons Claim 6 is patentable.

Claim 8 is patentable for the reasons Claim 1 is patentable.

The Examiner has rejected Claims 10-19 as being unpatentable over Suzuki in view of Cepulis. Applicants respectfully traverse this rejection. Cepulis has been previously discussed in combination of a previous rejection with Abramson, that was overcome prior to this Office Action. As explained above, Suzuki fails to teach or suggest the limitation of "determining a master unit abnormally terminated when the master unit attempted to access a first slave unit which caused the master unit to fail". Cepulis also fails to teach or suggest this limitation. The Examiner cites Cepulis simply for the supposed teaching that the master unit is

directed to avoid further accessing the failed slave unit. Accordingly, Claim 8 is patentable over the applied art of record. Claims 10-19 are dependent to parent Claim 8 and are patentable for the reasons Claim 8 is patentable.

In view of the foregoing amendments and remarks, it is respectfully requested that the outstanding rejections and objections to this application be reconsidered and withdrawn, and Claims 1-8 and 10-19, now in this application be allowed.



Respectfully submitted,

By

Ansel M. Schwartz, Esquire

Reg. No. 30,587

One Sterling Plaza

201 N. Craig Street

Suite 304

Pittsburgh, PA 15213

(412) 621-9222

Attorney for Applicants